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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,519	03/23/2004	Dennis A. Durbin	37955XFA	3397

7590 03/17/2005

John H. Sherman
c/o Legal Department
Intermec Technologies Corp.
550 Second Street, SE
Cedar Rapids, IA 52401

EXAMINER

KIM, AHSHIK

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/807,519	Applicant(s) DURBIN, DENNIS A.	
	Examiner Ahshik Kim	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/23/04 (initial filing of application).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21,23-29 and 31-36 is/are rejected.
- 7) ☒ Claim(s) 22 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continuation Data

1. Acknowledged this application is a divisional application of US serial No. 10/701,199
5 filed on November 04, 2003. Examiner notes that continuation link for the instant application goes back to US Serial No. 07/849,771. If warranted, Applicant must show that the subject matter claimed in the instant applicant were disclosed in US Serial No. 07/849,771.

Claim Rejections - 35 USC § 102

- 10 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
15 sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9, 12-16, 18, 21-24, 26-33, and 36 are rejected under 35 U.S.C. 102(b) as being
anticipated by Longacre, Jr. (US 5,773,806, hereinafter “Longacre”).

Re claims 1, 5, 12, 14, 21, 27, 32, and 36, Longacre discloses an apparatus and the methods for reading two dimensional barcodes (see abstract). The apparatus comprises a light
20 source 16 emitting light on the bar codes (col. 5, lines 6+), an optical subsystem including focusing optics 19, and a photosensitive subsystem embodied as an 1-D image sensor (col. 1, lines 45+). The 1-D sensor essentially captures a selected segment of the two-dimensional code (col. 1, lines 66).

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Re claims 2-4, as long as the trigger is pressed and moving across the two-dimensional barcodes, the image is captured and retained for processing (see figures 5-1, 5-2, 5-3, and 9; col. 9, lines 36+). The captured image while the trigger was pressed is automatically stored and processed downstream – a/d conversion, decoding, etc.

5 Re claim 6, the optical reader is capable of finding and recognizing a particular code pattern (col. 2, lines 15-29).

Re claims 7, 8, 15, and 28, as shown in figure 5, the reader is a portable, hand-held scanner (see figure 5, abstract). Although not explicitly stated, the reader has to have power source to operate and communicate with other systems (col. 5, lines 27+; col. 6, lines 59+).

10 Re claims 9, 16, and 31, the system can also process 1-D code pattern (see abstract)

Re claims 13 and 26, the captured and converted signals are decoded (col. 2, lines 20-48).

Re claims 18, 23, 24, 29, and 33, it is also known that 2-D image sensor can be used to capture 2-D code patterns (col. 1, lines 45+). The pattern recognizing feature possesses some built-in intelligence/algorithm to recognize such.

15

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 10, 11, 17, 19, 20, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Longacre, Jr. (US 5,773,806) in view of Krichever et al. (US 5,396,054, hereinafter "Krichever"). The teachings of Longacre have been discussed above.

Longacre fails to specifically teach or fairly suggest that the scanner is emitting raster-
5 type scanning beam and equipped with zoom function.

Krichever discloses an optical reader emitting a raster scanning beam (see abstract; col. 1, lines 1+). The optical reader is further comprised of optical zooming feature (col. 5, lines 1+).

In view of Krichever's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known raster scan and zooming features to
10 the teachings of Longacre in order to improve overall functionality of the scanner. Raster scan is also called omni-directional scan since the beams appear to cover an area as opposed to a linear beam. Accordingly, the raster scanner is easier to apply, and therefore reduces the users' physical effort in trying to align the beam to the target. Zooming is another well known feature used in optical readers and camera. By using the zooming feature, the user could capture the
15 code from a far distance, alleviating physical labor and potential danger, and therefore an obvious expedient.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Longacre, Jr. (US 5,773,806) in view of Chu et al. (US 5,702,059, hereinafter "Chu"). The teachings of Longacre
20 have been discussed above.

Longacre fails to specifically teach or fairly suggest that the scanner is further comprised of steps of reducing hand-jitter of a user.

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Chu discloses an optical reader (see abstract) reading optical code patterns such as 1-D and various 2-D such as UCP, C1 28, PDF417, etc. (col. 1, lines 30+). The optical reader, by reducing the exposure time, is highly tolerant of the hand-jitter (col. 5, lines 39-53).

In view of Chu's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known jitter-reducing means to the teachings of Longacre in order to correctly capture the target image. Blurry image and high noise or other impurities contribute in incorrect A/D conversion and therefore incorrect signal. Accordingly, one ordinary skill in the art would contemplate incorporating such feature to accurately convey information deciphered from the barcode.

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Allowable Subject Matter

7. Claims 22 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15 8. The following is a statement of reasons for the indication of allowable subject matter: the claims are directed at an optical reader reading and processing 1-D or 2-D code. The apparatus is designed to capture a part (or slice) of the two-dimensional barcode. User is given an opportunity to accept the captured segment via feedback. The cited references achieve such feature in automated manner. Therefore such functionality is neither disclosed nor suggested by
20 the cited references.

Conclusion

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I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Hecht (US 6,749,110); Krichever et al. (US 5,591,952); Cherry et al. (US 5,929,421); Baker et al. (US 5,517,587) disclose various embodiments of optical scanner. Applicant is respectfully suggested to carefully review these references.

5 II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (571)272-2393. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

10 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (571)272-2398. The fax number directly to the Examiner is (571)273-2393. The fax phone number for this Group is (703)872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

15 *All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

20 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

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Ahshik Kim
Patent Examiner
Art Unit 2876
March 11, 2005

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